THE EFFECTIVENESS OF USING *LINKTREE* AND *WORDWALL* APPLICATIONS ON IPS LEARNING OUTCOMES FOR CLASS V SDN CILANGKAP 01

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ARTICLE INFO	ABSTRACT
	In this globalization era, information technology has rapidly grown, and it gives a huge effect on the education field. The use of application technology in the world of education is unavoidable today. Because of this covid-19 pandemic, online learning has been a new mode and the education institutions inevitably should use the application technology in their learning
	process. This research suggests *Linktree* and *Wordwall* as new alternatives that can be used by the student in the learning process. This research focuses on the effectiveness of using *Linktree* and *Wordwall* applications on IPS learning outcomes of the student class V. This research is quantitative research with a correlational approach. This approach is used to reveal the relationship and the level of the relationship between two or more variables. The result of the research is described based on the obtained data from the questionnaires and tests. The results of this study indicate that there is a significant relationship between the use of *Linktree* and *Wordwall* applications on Social Studies Learning Outcomes for Class V students with a correlation coefficient between X_1 and Y of 0,365. The provisions of the correlation test by comparing $r_{count} > r_{table}$ (0,365 > 0,355) and p-value of 0,022 < 0,05. Therefore, there is a significant relationship between X_1 and Y. The correlation coefficient between X_2 and Y of 0,477 > r_{table} 0,355. The provisions of the correlation test by comparing $r_{count} > r_{table}$ = 0,477 and p-value of 0,003 < 0,05. By this result, it can be concluded that the relationship X_2 and Y is significant.

1.INTRODUCTION

In this globalization era, information technology has grown rapidly, and this phenomenon gives a big impact on the education system. This situation can be a consideration for education institutions to be more innovative in ruling the teaching-learning process. Today, technology creates alternative ways in the teaching-learning process such as the use of an application. There are many applications based on technology networking that support the learning process. This application offers students or teachers to study through a virtual network. Online learning is the process of transforming knowledge based on internet networks so that it can bring up various types of interactions between

students and teachers in the learning process, (Sadikin & Hamidah, 2020). This model is commonly known during this covid-19 pandemic era. This pandemic requires people to do all the activities at home. Therefore, online learning is an alternative for students. Applications such as *WhatsApp, Zoom Meeting, Google Meet, Google Classroom, Google Form,* and *Youtube* have become the most popular application in an online learning system (Putra, 2021). Apart from these applications, Linktree and Wordwall are new alternatives that students can use in the online learning process.

Alternatives in online learning are needed so that learning can be more varied. Based on research conducted by (Purwanto et al., 2020), the online learning system becomes the cause of students' boredom because they are at home too long and cannot interact with their friends, play, and have fun. This new adaptation affects student in learning because boredom can lead to poor understanding of learning materials and student learning outcomes to be less optimal, one of which is in IPS subjects as described in research conducted by (Amalia & Adi, 2020) that the success rate of IPS learning has decreased the value of comprehending ability.

Linktree is a *platform freemium* existed since 2016. It is from Australia, created by Alex Zaccaria together with his brother Anthony Zaccaria and his friend Nick Humphreys (Zaccaria, 2020). This application allows users to put all the learning links they want to share in one space. A simple Linktree display can be very easy for students to use, besides that teachers can also adjust the appearance of the page, add, delete, and change links as needed before finally being distributed to students so that this application is feasible to use as a new alternative in online learning media. *Linktree* is feasible to use to facilitate students in learning mathematics with the final percentage result of 86.03%. Wordwall is a website-based application that can be used as a learning evaluation medium, especially in the form of quizzes, matchmaking, grouping, and so on, (Pertiwi, 2020). This application provides at least eighteen templates for making evaluation questions that can be used for free and users can easily change the template as they want, (Aribowo, 2021). The use of *Wordwall* as a learning evaluation medium can motivate students to think and respond quickly because there is a time limit for the work that can stimulate students' enthusiasm. This fact is in line with the research result conducted by (Putri, 2020) related to the effectiveness of the use of

Wordwall media in math subject online learning with 80, 35% completeness of the test. Therefore, the use of *Linktree* and *Wordwall* is significantly effective because of the percentage of the learning outcome result.

Effective learning is a learning process that involves students actively, (Yugianti, Purwanto & Ninawati, 2018). Students are successful in their learning if they achieve their goals in learning or instructional goals, (Susanto, 2013). Learning outcomes indicates the success of the learning process. In general, learning outcomes can be seen from three aspects, namely conceptual understanding (cognitive aspects), student attitudes (emotional aspects), and processing skills (psychomotor aspects), (Hadi, 2017). According to Bloom (Susanto, 2013) comprehending is an ability of understanding meaning in learning activities. Finally, comprehending is how far student receives and understand subject materials delivered by the teacher. Understanding is not just knowing the information received but also the meaning of the information so it can provide a meaningful change for individuals who learn, (Indriani et al., 2019). In addition, comprehension can also be seen from the affective domain related to student attitudes regarding emotions, feelings, values, and attitudes that indicate acceptance or rejection of something, (Bloom in Riwahyudin, 2015). According to Indrawati (Susanto, 2013), Process skills are designed to be directed at the scientific method (both cognitive and psychomotor) that can be used to understand a concept, principle or theory and develop existing concepts.

IPS or Social Studies consists of various branches of the social sciences and humanities including history, sociology, geography, economics, political sciences, law, and culture. Social Studies is based on social realities and presents an interdisciplinary approach in these aspects and areas of the social sciences. Social studies subjects in elementary schools teach essential concepts from social science to shape students into good citizens (Susanto, 2016). Through social studies, students are educated and directed to become citizens of Indonesia that are democratic, and responsible, and citizens of the world who love peace. According to Sapriya, (Siska, 2016) social studies subjects taught in Indonesia essentially prepare students to become citizens who have the knowledge, skills, and attitudes and values, so that they can be problem solvers, good in making decisions, and participate in various activities in the community.

This research examines the effectiveness of *Linktree* Dan *Wordwall applications on the learning outcome of students class V of SDN Cilangkap 01.* This research is expected to draw how teaching technique is very important to increase student's comprehension in learning, specifically IPS subject, and to ensure that *Linktree* and *Wordwall* applications are useful during this online learning system.

2. METHODOLOGY

This research is quantitative. Quantitative research means collecting and analyzing data described by numbers, (Siyoto & Sodik, 2015). The approach of this research is correlational. This approach is used to describe the relationship and the level of the relationship between two or more variables, (Creswell, 2012). The two variables in this research are the independent variable (X) and the dependent variable (Y). the independent variable is the use of *Linktree* (X_1) and *Wordwall* (X_2), while the dependent variable is the students (Y).
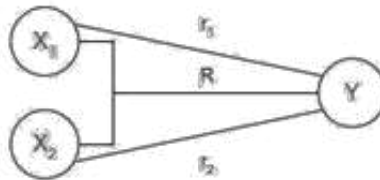
Picture 1. Multiple Correlation Research Design

Data collection techniques in this study used tests to determine student learning outcomes and a questionnaire to determine the effectiveness of the use of Linktree and Wordwall conducted in class V-E to obtain data, facts, and information related to the problems in this study. The type of instrument used to determine student success in learning is a test. A test is a tool or procedure used to find out and measure something in an activity, in a way and with predetermined rules, (Arikunto, 2018). In this study, the test was made in the form of multiple-choice with a total of 20 items. In addition to the test instrument, the researcher also used a non-test research instrument in the form of a questionnaire with 25 questions to determine the effectiveness of using Linktree and Wordwall according to students. Zainal Arifin (Iwan Hermawan, 2019), states a questionnaire is a research tool consisting of several questions or statements that freely collect data and information based

on the experience of research respondents. The population is a general domain, which contains objects and subjects with certain qualities and characteristics, according to what researchers apply to their research to draw the conclusion, (Sugiyono, 2017). The population of the research is class V-E SDN Cilangkap 01 Pagi Jakarta Timur that consists of 32 students. This research uses saturated sampling. This sampling technique is used to accommodate all the populations involved in the research, (Wagiran, 2014).

The data analysis technique is conducted through *Pearson Product Moment* using *SPSS 22.0 for Windows*. To show the percentage of the score, the formula is designed as follow:

$$P = \frac{f}{n} \; X \; 100\%$$

The percentage is described through the interval table as follows.

Table 1. Score Interval

Score	Category
85-100%	Very good
65-84%	Good
45-64%	Poor
25-44%	Very poor

Testing the validity of the instrument using the formula of *Pearson Product Moment.* The item is valid if the value of $r_{count} > r_{table}$. To find r_{table}, it uses the formula of df = N-2. In the validity test, it is found N = 31 and if it is put in the formula of df = 31 – 2 = 29, the result show r_{table} = 0,355. The reliability test in this research is *alpha Cronbach* formula. It is based on the decision to compare the value of r_{count} and r_{table}.

3. RESULTS AND DISCUSSION

Based on the results of the calculation of 30 questions from each student response questionnaire in the use of the Linktree and Wordwall applications, as well as 30 test items that have been tested, it is found that there are 25 valid questions, for the 30 test items that were tested the valid results are 20. question item. The value of the reliability coefficient of the Linktree questionnaire obtained r count = 0.9011. The value of the reliability coefficient

of the Linktree questionnaire obtained r_{count} = 0.9011, the reliability coefficient of the Wordwall questionnaire obtained r_{count} = 0.9398, and the test item reliability coefficient obtained r count = 0.890. The value of r_{table} at a significant level = 0.05 with df = 29 obtained r_{table} = 0.355. Based on the value of the reliability coefficient of each instrument with r_{table} = 0.355, it is known that r_{count} > r_{table}, the questionnaires and questions compiled in this study are reliable and feasible to use.

The Students' Responses in Using *Linktree* and *Wordwall*

The data related to the student responses in using the Linktree and Wordwall applications were obtained from a questionnaire containing 25 questions given to fifth grade students at SDN Cilangkap 01 Pagi year of 2020/2021. The number of respondents were 32 students. Based on the results of descriptive analysis through SPSS 22.0 for Windows, the variable using the Linktree application obtained a maximum score = 92, while the minimum score were = 55, the use of Wordwall obtained a score = 90, while the lowest were = 60. To determine the percentage value of the using Linktree and Wordwall applications, was calculated using the percentage index formula as follows:

$$PX_1 = \frac{f}{n} \ X \ 100\%$$

$$= \frac{2435}{3200} \ X \ 100\%$$

$$= 76{,}09375$$

$$PX_2 = \frac{f}{n} \ X \ 100\%$$

$$= \frac{2347}{3200} \ X \ 100\%$$

$$= 73{,}34$$

The value of 76,09375 if interpreted in the score interval table, is in the ratio of 65-84% with a good category. So it can be concluded that the use of the Linktree application in social studies learning was responded well by students. Likewise, the percentage results from the use of the Wordwall application which obtained a score of 73.34 also obtained a good category. So it can be concluded that the use of Linktree and Wordwall applications received a good response from students in the social studies learning process.

The Description of Students Social Studies Learning Otucomes.

Through 20 multiple choice questions, tests were conducted to determine student learning outcomes scores. The following is a table of the frequency distribution of scores obtained by students

Table 2. The frequency distribution of scores

Learning Outcomes

Score		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	1	3.1	3.1	3.1
	70	3	9.4	9.4	12.5
	75	6	18.8	18.8	31.3
	80	7	21.9	21.9	53.1
	85	7	21.9	21.9	75.0
	90	6	18.8	18.8	93.8
	95	2	6.3	6.3	100.0
	Total	32	100.0	100.0	

Based on the frequency distribution table above, it can be seen that from 32 students, 1 student scored 60, 3 students scored 70, then 6 students scored 75, 7 students scored 80 and 85, while 6 students scored 90, and 2 students got a score of 95. In addition, from the table it can be seen that the descriptive analysis through the *SPSS 22 for Windows* method is as follows:

Table 3. Descriptive Analysis of Learning Outcomes

N	Mean	Median	Mode	Std. Deviation	Minimum	Maximum
32	81,41	80,00	80	8.056	60	95

From the descriptive analysis table above, it can be seen that the maximum score obtained by students is 95, while the minimum value obtained is 60. The average or mean of student

scores is 81.41. The median of student scores is 80.00, and the most frequently obtained score or Mode is 80. Whlie the standard deviation of student scores is 8.056.

Correlation analysis Test

The correlation between the use of the Linktree application and student learning outcomes is calculated using SPSS 22 as follows:

Table 4. X_1 and Y Coefficient Correlations

Correlations

Control Variables			LINKTREE	LEARNING OUTCOMES
WORDWALLLINKTREE		Correlation	1.000	.365
		Significance (1-tailed)	.	.022
		df	0	29
	LEARNING OUTCOMES	Correlation	.365	1.000
		Significance (1-tailed)	.022	.
		df	29	0

Based on the results of the analysis in the table above, it is known that the correlation value between Linktree and Learning Outcomes is 0.365 and the significance value is 0.022 <0.05. So the correlation between X1 and Y by controlling the variable X2 is significant and positive. Then to be able to find out how strong the degree of relationship is, the researchers consulted rcount to the critical value table for r product moment as follow:

Table 5. Critical value of r Product Moment

Range	Classification
0,80 - 1,00	Very Strong
0,60 - 0,799	Strong
0,40 - 0,599	Strong Enough

0,20 – 0,399	Weak
0,00 – 0,199	Very Weak

When consulted on the critical value table r Product Moment, the correlation value between Linktree and Learning Outcomes is in the low classification. Furthermore, the correlation between the use of the Wordwall application and the social studies learning outcomes of students using SPSS 22.0 is calculated as follows:

Tabel 6. X_2 and Y Coefficient Correlations

Correlations

Control Variables			WORDWALL	LEARNING OUTCOME
LINKTREE WORDWALL	Correlation	1.000	.477
		Significance (1-tailed)	.	.003
		df	0	29
	LEARNING OUTCOME	Correlation	.477	1.000
		Significance (1-tailed)	.003	.
		df	29	0

Based on the results obtained from the table above, it was obtained (ry2.1) of 0.477 and a significance of 0.003 or less than 0.05. Hence, it can be concluded that there is a significant correlation between X2 and Y by controlling for the X1 variable. If seen from the critical value table of r Product Moment (table 5) the correlation value between Wordwall and Learning Outcomes is in a fairly strong classification.

Hypothesis test

Hypothesis testing is done partially with the t-test and simultaneously with the F-test. The results of the partial significance test calculated using SPSS 22.0 are as follows:

Table 7. the partial significance test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	25.694	13.944		1.843	.076
LINKTREE	.330	.156	.321	2.110	.044
WORDWALL	.418	.143	.444	2.920	.007

a. Dependent Variable: Learning Outcomes

The results of the partial significance test as presented in the table show the statistical value for the X1 variable, namely thit = 2.110 and a significance value of 0.044/2 = 0.022 which is smaller than 0.05 using the righ-side test, meaning H0 is rejected, so it means that the use of the Linktree application is effective. on students' social studies learning outcomes. Furthermore, the statistical value for the X2 variable is thit = 2,920 and a significance value of 0.007/2 = 0.0035 < 0.05 (right side test), or H0 is rejected, which means that the use of the Wordwall application is effective on students' social studies learning outcomes. Furthermore, to find out the significant relationship between the use of Linktree and Wordwall Applications on Social Studies Learning Outcomes simultaneously calculated using SPSS 22.0 is as follow:

Tabel 8. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.605^a	.366	.323	6.629	.366	8.387	2	29	.001

a. Predictors: (Constant), WORDWALL, LINKTREE

Simultaneous significance test is obtained from the Model Summary table above. in the second column it can be seen that the multiple correlation coefficient (Ry.12) is 0.605 and Fhit (Fchange) is 8.387, Sig. F Change of 0.001 <0.05 so that H0 is rejected and Ha is

accepted. Therefore, the multiple correlation coefficient Y between X1 and X2 is large and significant. While the coefficient of determination is shown by R Square = 0.366 or R2y.12 x 100% = 0.366 x 100% = 36.6%. It can be interpreted that 36.6% of the value in the Learning Outcome variable (Y) can be explained by the use of Linktree (X1) and Wordwall (X2) applications. So it can be concluded that the effectiveness of using Linktree and Wordwall applications together on student social studies learning outcomes is 36.6%.

The use of Linktree and Wordwall applications is effectively used in learning. According to Putri (2020), the use of Linktree and Wordwall media in the closing activity for mathematics learning on whole number material for class 1 at MIN 2, South Tangerang City went smoothly and very well. In addition, the use of Linktree and Wordwall media can be seen from the results of learning achievement that has been running effectively with students' mastery on mathematics tests with a percentage of 80.35%. So it can be concluded that Linktree and Wordwall are very effective and support the success of the learning process.

5. CONCLUSION

The Effectiveness of the Use of Linktree and Wordwall Applications on Social Studies Learning Outcomes of Class V SDN Cilangkap 01, namely: (1) The use of the Linktree Application is effective on IPS learning outcomes of Class V students of SDN Cilangkap 01, it is proven that there is a positive and significant correlation between the use of the application Linktree on IPS learning outcomes, (2) the use of Wordwall Applications is effective on IPS learning outcomes for fifth grade students at SDN Cilangkap 01 because it shows a positive and significant correlation between the use of Wordwall applications the IPS learning outcomes for fifth grade students at SDN Cilangkap 01, (3) There is a positive and significant relationship between the use of the Linktree and Wordwall applications on the IPS learning outcomes of Class V SDN Cilangkap 01 students.

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